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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,445	11/13/2000	Zoran Krivokapic	AMDI-08399US0	7218

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EXAMINER
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OWENS, DOUGLAS W

ART UNIT	PAPER NUMBER
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2811

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

09/711,445

Examiner

Douglas W Owens

Applicant(s)

KRIVOKAPIC ET AL.

Art Unit

2811

-- Th MAILING DATE of this communication appears on th cover sheet with the corresp ndence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2003.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- 11) ☒ The proposed drawing correction filed on 10 March 2003 is: a) ☐ approved b) ☒ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

#### ***Previously Allowed Claims***

1. Claims that were previously indicated allowable in the Office Action mailed on December 3, 2002 have been rejected in light of newly discovered issues below. Accordingly, prosecution has been reopened.

#### ***Drawings***

2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on March 10, 2003 have been disapproved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

The corrections to the figures are approved. However, the individual figures cannot be "cut and pasted" into the originally filed drawing sheets, since the Patent Office no longer makes drawing changes. Corrected figure 4b should be on the same drawing sheet as figures 2a – 2c, 3a – 3c and 4a – 4c, as originally filed. Corrected figure 5b should be on a drawing sheet including figures 5a – 5c, 6a – 6c and 7a – 7c, as originally filed. Corrected figure 13a should be on a drawing sheet including figures 12a – 12c, 13a – 13c, corrected figure 14a – figure 14c.

#### ***Specification***

3. The disclosure is objected to because of the following informalities: Lines 19 – 21 of page 2 describe a step of depositing a conformal oxide and forming a trench in the conformal oxide, in the summary of the invention. There is no disclosure in the detailed

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description of such an embodiment. The detailed description only teaches forming a trench in a TEOS oxide, not a conformal oxide.

Appropriate correction is required.

### ***Claim Objections***

4. Claims 17 – 19 are objected to because of the following informalities: In each of the claims, "(f)" should be replaced with "(g)". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 13 – 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 13 requires that a trench be formed in a conformal oxide (parts (d) and (e)). The specification only discloses forming a trench in a TEOS oxide.

Claim 13 further requires that a second nitride layer is disposed on the device (part (g)). The specification does not teach a second nitride layer for the claimed embodiment (See page 11, lines 16 – 19).

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Claim 13 requires that an implant be performed to the polysilicon and silicon-on-insulator substrate. The Examiner cannot find support for this limitation in the written specification.

Claim 20 cites the limitation of polishing the polysilicon *and substrate* between steps (f) and (g) (emphasis added). The specification only discloses polishing the polysilicon between steps (f) and (g).

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 13 – 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "...said second nitride layer..." in line 2 of step (g).

There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "...implanting an impurity into exposed portions of polysilicon...and of said silicon-on-insulator substrate..." There is insufficient antecedent basis for the limitation "said silicon-on-insulator substrate". Additionally, it is not clear what portion of the silicon-on-insulator substrate the impurity is implanted into.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas W Owens whose telephone number is 703-308-6167. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 703-308-2772. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

DWO  
June 2, 2003

Handwritten signature of Steven Loke.